

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/052557

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 F16G1/12 D07B1/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16G D07B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 960 749 A (HANKOOK TIRE CO LTD) 1 December 1999 (1999-12-01)	1-6, 10-14
A	page 2, paragraph 1 page 2, paragraph 9 – page 3, paragraph 14; claims 3,4; figures 1,2; table 1 -----	7-9
A	EP 0 548 539 A (TOKUSEN KOGYO COMPANY LIMITED) 30 June 1993 (1993-06-30) claims 1,2; table 1 -----	1-9,14
A	EP 0 752 325 A (YOKOHAMA RUBBER CO LTD) 8 January 1997 (1997-01-08) page 4, line 24 – line 27; claim 1; table 1 ----- -/-	1-9,14



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

- °A° document defining the general state of the art which is not considered to be of particular relevance
- °E° earlier document but published on or after the international filing date
- °L° document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- °O° document referring to an oral disclosure, use, exhibition or other means
- °P° document published prior to the international filing date but later than the priority date claimed

- °T° later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- °X° document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- °Y° document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- °&° document member of the same patent family

Date of the actual completion of the international search

10 February 2005

Date of mailing of the international search report

01/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Heinzler-Rödl, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/052557

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 784 874 A (BRUYNEEL POL ET AL) 28 July 1998 (1998-07-28) cited in the application column 2, line 6 – line 28 column 2, line 64 – column 6, line 58; claims 1,2; figures 1-4 -----	1-14
A	US 4 602 476 A (RIGGS ET AL) 29 July 1986 (1986-07-29) column 1, line 9 – line 25 column 2, line 3 – line 45 column 3, line 19 – line 35; claims 1,2; figure 1 -----	10-13
A	US 4 123 894 A (HUGHES ET AL) 7 November 1978 (1978-11-07) column 3, line 59 – column 4, line 18 column 5, line 36 – line 50; figures 1,2,2A,2B -----	10-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/052557

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0960749	A	01-12-1999	KR CN EP JP JP US	276014 B1 1229866 A ,C 0960749 A2 3165130 B2 2000178887 A 6098393 A		15-12-2000 29-09-1999 01-12-1999 14-05-2001 27-06-2000 08-08-2000
EP 0548539	A	30-06-1993	JP JP JP DE DE EP US	2045334 C 5179583 A 7068673 B 69225054 D1 69225054 T2 0548539 A2 5502960 A		09-04-1996 20-07-1993 26-07-1995 14-05-1998 15-10-1998 30-06-1993 02-04-1996
EP 0752325	A	08-01-1997	JP EP KR US WO	8258509 A 0752325 A1 247517 B1 5894875 A 9622892 A1		08-10-1996 08-01-1997 01-05-2000 20-04-1999 01-08-1996
US 5784874	A	28-07-1998	BR CA DE DE EP ES ID JP	9703435 A 2202313 A1 69726052 D1 69726052 T2 0811786 A1 2208813 T3 17320 A 10061723 A		27-10-1998 03-12-1997 18-12-2003 08-07-2004 10-12-1997 16-06-2004 18-12-1997 06-03-1998
US 4602476	A	29-07-1986	AU AU CA GB IN NZ ZA	577997 B2 5032285 A 1248845 A1 2167777 A ,B 166562 A1 214209 A 8508814 A		06-10-1988 12-06-1986 17-01-1989 04-06-1986 09-06-1990 27-11-1987 30-07-1986
US 4123894	A	07-11-1978	NONE			